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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/790,883

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Hisamitsu Takagi

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STAAS & HALSEY LLP

SUITE 700

1201 NEW YORK AVENUE, N.W.

WASHINGTON, DC 20005

EXAMINER

SINGH, RAMNANDAN P

ART UNIT

PAPER NUMBER

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<div style="border: 1px solid black; width: 150px; height: 20px; margin: 0 auto;"></div> <p style="text-align: center;">Office Action Summary</p>	Application No. 10/790,883	Applicant(s) TAKAGI, HISAMITSU	
	Examiner Ramnandan Singh	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-14, 16 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-14, 16 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed Nov 26, 2007 have been fully considered but they are not persuasive.

(i) Applicant's argument—"The Examiner appears to indicate that the movable portion 18 of Miyashita corresponds to a second housing that rotates, from a folded state with respect to the casing 10 (see Fig 8 of Miyashita)" on page 6.

Examiner's response---Examiner respectfully disagrees. Applicant is directed to the Office action, page 2, paragraph 2, which clearly states, "a second housing (50) foldable over the first housing (52), as shown in Figs. 10 and 11 [col. 8, lines 6-28]". As a result, Examiner asserts that there is absolutely no contradiction regarding the second housing in the Office action.

(ii) Applicant's argument—"Since Miyashita and Andrews et al, alone or in combination, do not discuss or suggest all of the features recited in claim 7, claim 7 patentably distinguishes over Miyashita and Andrews et al" [Page 7, last paragraph].

Examiner's response---Examiner disagrees. In view of the above, response, Examiner asserts that the combination of Miyashita and Andrews et al teaches all the limitations of claim 7, as set forth in the Office action, page 4, paragraph 3.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyashita [US 6,731,912 B1] in view of Beutler et al [US 5,933,330].

Regarding claim 12, Miyashita discloses a mobile radio communication apparatus, as shown in Figs. 10 and 11, comprising:

- a first housing (52);
- a second housing (50) foldable over the first housing[col. 8, lines 6-15]; and
- a hinge part (54A) that foldably connects the second housing to the

first housing around a rotational center axis [col. 8, lines 6-28],

wherein the hinge part includes:

a one touch opening part that automatically opens the second housing, relative to the first housing around the rotational center axis in a non-stop motion, from a folded state by a callable (i.e. selectable) angle that enables a user to call without further opening the second housing [Fig. 8; col. 7, lines 22-25]; and

an auxiliary rotational part (54B) that rotates the second housing around an orthogonal shaft orthogonal to the rotational center axis of the hinge part [Figs. 10-11; col. 8, lines 16-28].

Miyashita does not teach expressly a hinge part containing a damper (i.e. spring) to break an opening action.

Beutler et al teach a portable radio telephone (100) having an upper housing (102) and a lower housing (108) rotatably connected via a hinge (116), as shown in Figs. 1-2 [col. 2, line 57 to col. 3, line 14] using a damper (i.e. spring) (370) part that brakes an opening action of the second

housing by the one touch opening part [Figs. 3-4, 30; col. 3, line 64 to col. 5, line 5; col. 5, lines 46-57; col. 17, lines 30-61].

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Beutler et al with Miyashita in order to enable the upper housing 102 to be easily opened and closed [Beutler et al; col. 17, lines 59-61].

Claim 14 is essentially similar to claim 12 and is rejected for the reasons stated above.

Regarding claim 13, the combination of Miyashita and Beutler et al further teaches the mobile radio communication apparatus, wherein the damper part (370) brakes the second housing when the second housing forms a third angle or larger relative to the first housing [Beutler et al; Figs. 3-4, 30; col. 3, line 64 to col. 5, line 5; col. 5, lines 46-57; col. 17, lines 30-61].

4. Claims 2-11, 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyashita [US 6,731,912 B1] in view of Andrews et al [US 6,439,905 B2].

Regarding claim 7, Miyashita discloses a mobile radio communication apparatus, as shown in Figs. 10-11, comprising:

- a first housing (52) ;
- a second housing (50) foldable over the first housing [col. 8, lines 6-15];
- a hinge part (54A) that foldably connects the second housing to the first housing around a rotational center axis [col. 8, lines 6-28], the hinge part including a one touch opening part that automatically opens the second housing, relative to the first housing around the rotational center axis in a non-stop motion, from a folded state by a callable (i.e. selectable) angle that enables a user to call without further opening the second housing [Fig. 8; col. 7, lines 22-27] ; and
- an auxiliary rotational part (54B) that rotates the second housing around an orthogonal shaft orthogonal to the rotational center axis of the hinge part [Figs. 10-11; col. 8, lines 16-28].

Miyashita does not teach expressly a flexible printed circuit board.

Andrew et al teach a flexible printed circuit board wound around an orthogonal shaft, the flexible printed circuit board electrically connecting the first and second housings to each other [Figs. 2-4, 6; col. 2, lines 54-63; col. 3, lines 5-28].

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of Andrew et al with Miyashita in order that the connector does not make contact with components mounted on the PCB [Andrew et al; col. 3, lines 10-12].

Claim 16 is essentially similar to claim 7 and is rejected for the reasons stated above.

Regarding claim 2, the combination of Miyashita and Andrew et al further teaches the mobile radio communication apparatus, wherein the auxiliary rotational part (54B) inherently includes a cam part that clicks and

provides a semifixed state whenever the second housing rotates by a predetermined angle around the orthogonal shaft [Miyashita; Figs. 10-11].

Regarding claims 3-6, the limitations are shown above.

Regarding claim 8, the combination of Miyashita and Andrew et al further teach the mobile radio communication apparatus, wherein the flexible printed circuit board is wound around the rotational center axis of the hinge part other [Andrew et al; Figs. 2-4, 6; col. 2, lines 54-63; col. 3, lines 5-28].

Regarding claim 9, the combination of Miyashita and Andrew et al further teaches the mobile radio communication apparatus, wherein the hinge part includes a free stop part (i.e. stopper claw 26) that maintains the second housing at an angle different from the callable (i.e. selectable) angle relative to the first housing [Miyashita; Fig. 5; Page 11, line 25 to Page 13, line 2].

Regarding claims 10-11, the limitations are shown above.

Regarding claim 17, the combination of Miyashita and Andrew et al further teaches a flexible printed circuit board wound around an orthogonal shaft, the flexible printed circuit board electrically connecting the first and second housings to each other [Andrew et al; Figs. 2-4, 6; col. 2, lines 54-63; col. 3, lines 5-28].

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory

period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramnandan Singh whose telephone number is (571) 272-7529. The examiner can normally be reached on M-TH (8:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (571) 272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access

Application/Control
Number: 10/790,883
Art Unit: 2614

Page 11

to the automated information system, call 800-786-9199 (IN USA OR
CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Ramnandan Singh', with a long horizontal stroke extending from the bottom right.

Ramnandan Singh
Primary Examiner
Art Unit 2614